



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,614	04/05/2006	Masami Yoshikawa	289089US3PCT	4242
22850 7590 04/21/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER CHAN, KAWING	
			ART UNIT	PAPER NUMBER
			2837	
			NOTIFICATION DATE	DELIVERY MODE
			04/21/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/574,614	Applicant(s) YOSHIKAWA, MASAMI	
	Examiner Kawing Chan	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02/18/09 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Amendments and Applicant Arguments submitted on 02/18/09 have been received and its contents have been carefully considered. The examiner wishes to thank the Applicant for the response to the Examiner's action and for amending the claims in the appropriate manner.

Claims 8-20 are newly added.

Claims 1-20 are pending for examination.

Specification

2. The disclosure is objected to because of the following informalities: The reference number of a door operation abnormality detecting sensor disclosed at page 17 lines 10-16 of the specification should be "48" instead of "49" (The reference number is indicated in page 7 of the amended specification submitted on 02/18/09).

Appropriate correction is required.

Claim Objections

3. The objection to claim 1 has been removed in response to Applicant's Amendments.

Drawings

4. The objections to the drawings have been removed in response to the Applicant's Amendments.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3, 11 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Shea et al. (US 4,491,199).

In Re claims 1 and 20, Shea discloses an elevator door apparatus (Figures 1 and 2) comprising:

- An elevator door (64) configured to move between a door closure position that closes an elevator entrance, a first open door position that opens the elevator entrance to a first open door width, a second open door position that opens the elevator entrance to a second door width greater than the first open door width (door may be opened at different selectable door widths) (Col 5 lines 3-6), and a fully open door position (88) (Col 4 lines 11-20 & Col 4 line 48 to Col 5 line 16);

- A door drive device (66) configured to drive the elevator door (Col 4 lines 20-30).
- A door control device (68) configured to select one of the first, second, and fully open door positions based on control information for controlling an operation of an elevator (door may be opened at different selectable door widths), and control the door drive device to stop moving the elevator door at the selected door open position (Col 5 line 17 to Col 7 line 26).

In Re claim 3, Shea discloses:

- A plurality of destination buttons provided in an inside of a car each configured to designate a destination door (Col 3 lines 28-31);
- A call request button provided in a landing (Col 3 lines 31-40);
- An operation device (open or close button inherently disclosed by Shea) configured to generate a door open position (fully open) request provided in at least one of an inside of a car and a landing, and the door open position request is input to the door control device as the control information; and
- The door control device is further configured to select a door open position (fully open) based on the door open position request (inherently disclosed by Shea) in the control information.

In Re claim 11, Shea discloses an elevator door apparatus (Figures 1 and 2) comprising:

- An elevator door (64) configured to move between a door closure position that closes an elevator entrance, a partially open door position (86) that opens the elevator entrance to a partially open door width, and a fully door open position (88) that opens the elevator entrance to a fully open door width greater than the partially open door width (Col 4 lines 11-20 & Col 4 line 48 to Col 5 line 16);
- A door drive device (66) configured to drive the elevator door (Col 4 lines 20-30);
- A door control device (68) configured to select one of the partially open door position and the fully open door position based on control information for controlling an operation of an elevator (control device selects partial open door position or fully open door position on different situations) (Col 5 line 17 to Col 7 line 26); and
- The door control device (68) is further configured, when the partially open door position is selected, to adjust the partially open door width of the partially open door position based on the control information (Col 5 lines 3-6) (since door may be opened at different selectable door widths, Shea inherently discloses the control device can selectively adjust the door width to open the door at different partially door open positions), and

control the door drive device to stop moving the elevator door at the adjusted partially open door width (Col 5 line 17 to Col 7 line 26).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2 and 13 are rejected under 35 U.S.C. 103(a) as being obvious over Shea et al. (US 4,491,199).

In Re claims 2 and 13, Shea discloses a weighing device (Col 4 lines 11-20) configured to generate a weight signal (WT) in accordance with a size of a weight load in a car and produce, based on the weight signal (WT), weight information that is input to the door control device (68) (Figure 1: from 60 to 62 to 14 to 68).

Although Shea discloses the selection of partial open door position and fully open door open position is based on the weight information of the elevator (Col 1 lines 27-54 & Col 5 line 58 to Col 6 line 14 & Col 8 lines 9-41 & Col 10 lines 19-47), Shea fails to explicitly disclose the selection of one of the first and second open door positions is based on the weight information.

However, Shea suggests any number of different partial open door positions may be used (Col 5 lines 3-6) and the control of initial door opening (width of opening) is based on predetermined factor, such as detection of passenger load (Col 1 lines 27-54).

Therefore, the elevator door would open at a smaller door width when it is determined that the stop involves the transfer of a small number of passengers, and vice versa.

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of Shea to achieve the claimed invention, since Shea suggests multiple partial open door positions may be used and the initial door opening width is determined based on the weight information of the elevator. Therefore, it would have been obvious to one skilled in the art to open the elevator door at different door widths based upon the weight information of the elevator.

9. Claims 4, 10, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shea et al. (US 4,491,199) in view of Unno (JP 2001-226059 A).

In Re claims 4, 10, 15 and 16, Shea has been discussed above, but it fails to disclose the stop floor detecting sensor and the control device selects one of the first and second open door positions based on the stop floor information.

However, Unno discloses:

- A stop floor detecting sensor configured to detect a floor at which the car is stopped and produce, based on the detected floor, stop floor information that is input to the door control device as the control information (Figures 1 and 4; Paragraph [0014]) (the stop floor detecting sensor and the stop floor information are inherently disclosed by Unno since the elevator door 11 open with different widths at different floors); and
- The door control device is further configured to select one of the first and second open door positions (elevator door open with different widths as

needed) as the selected door open position based on the stop floor information in the control information (Figure 4 and Paragraph [0014]).

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of Shea with the teachings of Unno, since Unno suggests the elevator door may be opened at different door widths to fit the size of the entrance doors at different floors. It would have been obvious to one skilled in the art to change the open door width as needed at different floors since Shea also suggests the controlling of door opening width is related to the target floor (control to open door width bigger at lobby) and the traffic flow of the target floor (Col 1 lines 27-54).

10. Claims 6, 8, 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shea et al. (US 4,491,199) in view of Mizuno et al. (US 5,290,975).

In Re claims 6 and 18, Shea has been discussed above, but it fails to disclose the remote information.

However, with reference to Figures 1-2 and 5, Mizuno teaches the remote information (i.e. predetermined door opening/closing control data) due to remote operation from an elevator operation control room (7, 47-50) is input to the door control device (5, 5c) as the control information (Col 6 line 43 to Col 8 line 28).

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of Shea with the teachings of Mizuno, since Shea suggests any number of different partial open door positions may be used (Col 5 lines 3-6), it would have been obvious to one skilled in the

Art Unit: 2837

art to utilize the remote information from the control room to select the open door width of the elevator at the time of maintenance and inspection.

11. In Re claims 8 and 12, Mizuno discloses a door control device (5) which is configured to obtain a door opening speed pattern identifying a variable speed versus time relationship of moving the elevator door between the door closure position and the selected door open position, and control the door drive device (14) to control a moving speed of the elevator door according to the obtained door opening speed pattern (Figure 8; Col 2 lines 5-21).

Allowable Subject Matter

12. Claims 5, 7, 9, 14, 17 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

13. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lence Barreiro et al., Grundmann, Games and Hallene are further cited to show related teachings in the art.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kawing Chan whose telephone number is (571)270-3909. The examiner can normally be reached on Mon-Fri 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Benson can be reached on 571-272-2227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2837

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BENTSU RO/
Primary Examiner, Art Unit 2837

Kawing Chan
Examiner
Art Unit 2837